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PHOTOGRAPHIC INTELLIGENCE REPORT

VINA. INDUSTRIAL ACTIVITY COPY

INDUSTRIAL ACTIVITY  
NORTH VIETNAM

Declass Review by NIMA/DOD

CIA/PIR 75077

DATE JAN. 1967

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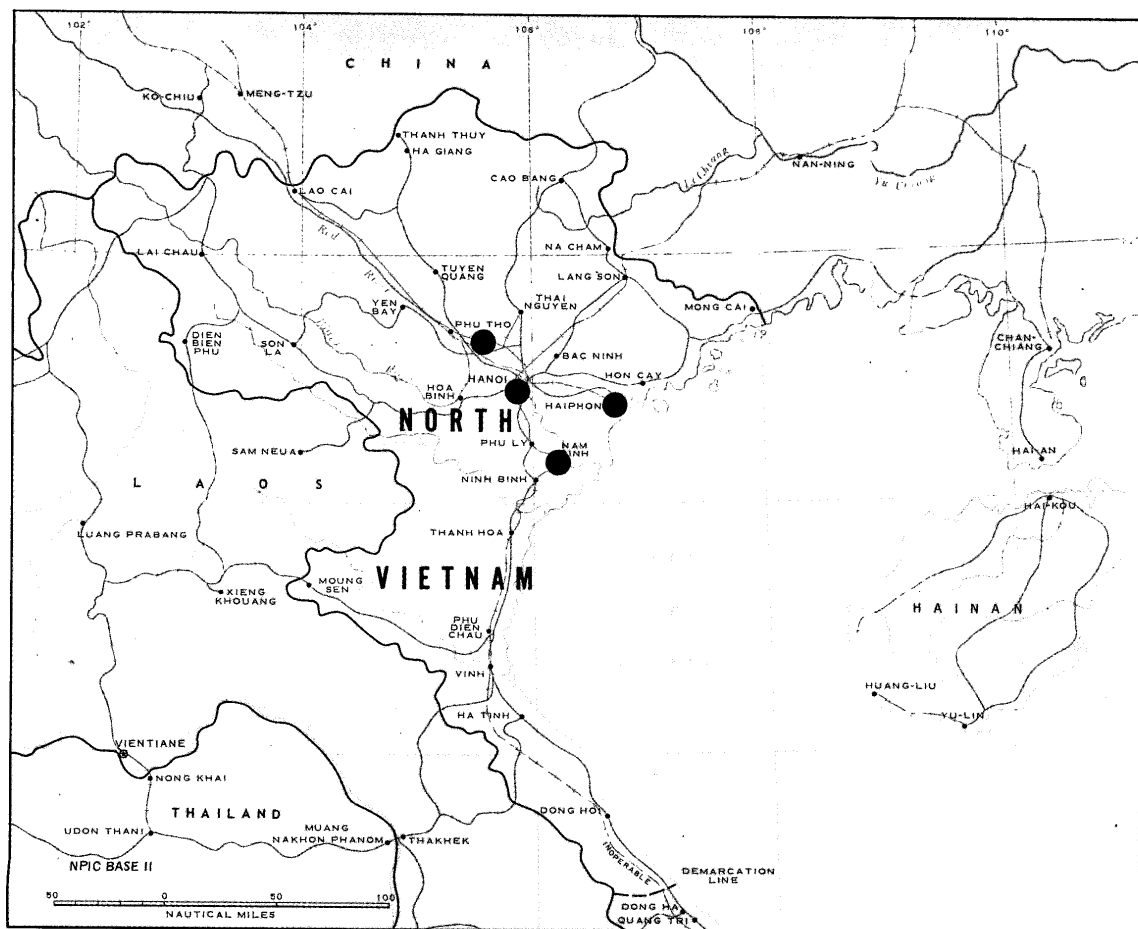


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CHEMICAL AND SCIENTIFIC SECTION  
INDUSTRIAL BRANCH, IAD

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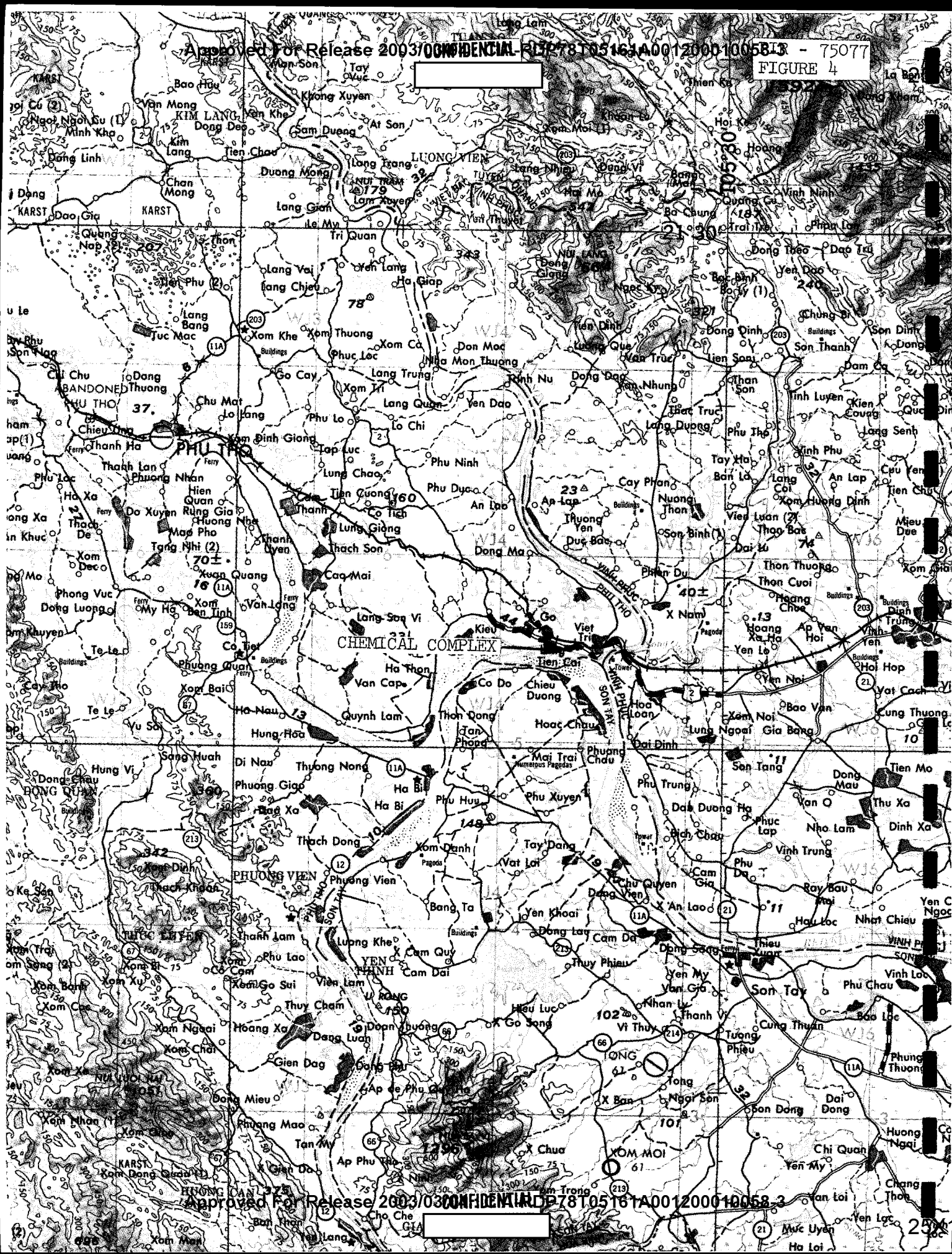
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FIGURE 1



FIGURE 2







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INDUSTRIAL ACTIVITY  
NORTH VIETNAM

The installations covered in this report have been chosen to assess the effect on industry of the air war in North Vietnam. Assessment of the industrial activity is based on such indicators as the resupply or depletion of raw materials, effluents from the plants, level of river and vehicular traffic, the presence of packing crates and growth of vegetation within the confines of the plants.

All of the industries and complexes included in the following study with the exception of the Hanoi Vehicle Repair and Assembly Plant, the Hanoi Chemical Fertilizer Plant, the Hanoi Textile Mill, and the Viet Tri Chemical Complex are located in or near civilian population centers.

Hanoi Chemical Fertilizer Plant  
20 56 41N - 105 50 23E  
(Figures 1 and 2)

The level of productive activity appears to be low; however, new construction activity is progressing in the northern section of the plant.

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Photography [ ] (Figure 6) showed no smoke coming from the large stack in the center of the plant and no vehicular traffic in the area. A number of packing crates was noted scattered in open storage and the raw materials stock appeared to be depleted (IB memo - 340/66).

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The latest photography, [ ] (Figure 7) reveals that no packing crates were present and new construction had occurred. In the northern section of the plant a new storage tank and a small building were near completion. A new service road into the northern section of the plant was noted under construction.

Hanoi Vehicle Repair and Assembly Plant  
20 59 55N - 105 48 41E  
(Figures 1 and 2)

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Plant activity apparently had decreased markedly between [ ] [ ] The level of activity within the plant as shown on the latest photography remains approximately the same as in [ ]

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[ ] coverage (Figure 8) revealed less than 20 vehicles in the plant area and there were signs of increased vegetation growth in the vehicle parks.

The latest coverage [ ] (Figure 9) reveals that the plant activity has remained the same with a possible increase in vegetation. Coverage since [ ] has been generally of poor quality and on an infrequent basis making it difficult to arrive at any definitive conclusions.

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Hanoi Machine Tool and Engineering Equipment Plant  
20 59 59N - 105 49 15E  
(Figures 1 and 2)

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This facility remained apparently inactive and relatively unchanged during the period from [ ]

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Photography of [ ] (Figure 10) showed an increase in the amount of vegetation within the plant area and a building outside the perimeter to the southwest was noted under construction.

The latest photography of [ ] (Figure 11), indicates no apparent change or activity within the plant. The only evidence of activity in the area of the plant continues to occur on the building to the southwest of the subject facility.

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Hanoi Textile Plant 8 March  
20 59 37N - 105 52 32E  
(Figures 1 and 2)

This facility was first studied on photography of [ ] (Figure 12) which provided little concrete information as to the level of production.

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There appeared to be considerable track activity and very little overgrowth of vegetation in the plant area. No smoke was noted coming from the heat and power plant. River traffic in the area was heavy, but not necessarily associated with the textile mill.

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Hanoi Engineering Plant Tran Hung Dao  
21 00 36N - 105 51 16E  
(Figures 1 and 2)

On photography of [ ] (Figure 13) this facility was first studied, however the level of production could not be determined. None of the indicators of activity (products, steam, smoke, vehicular activity) were discernible. The roads serving the plant appear to be in use, or at least are being maintained.

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Nam Dinh Textile Mill  
20 25 16N - 106 10 45E  
(Figures 1 and 3)

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A study of this installation was made using photography [ ]  
[ ] The [ ] coverage (Figure 14) revealed very little to indicate the plant's activity, but did show bomb damage to several buildings.

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The [ ] photography (Figure 15) revealed that additional bomb damage to two buildings was sustained during a second bombing attack between [ ] Building "A" shows severe structural damage to two sections of the roof and to an exterior wall; superficial damage to the roof and cratering of the ground floor were also evident. Building "B" sustained primarily superficial roof damage as well as a small amount of structural damage to several roof trusses.

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Proper conditions of light and camera angle permitted an analysis of the building interiors below the roof areas damaged in both bombings. It is significant to note that the floor space below the areas damaged prior to [ ] remains cluttered with debris from the early strike. The debris appears to have too much shape or body to be solely roof material and probably consists, in part, of equipment which was too damaged to warrant evacuation or repair. The specific type of equipment in the debris could not be identified.

Except for the rubble caused by the cratering of the floor in building "A", the interiors exposed by the second strike were noticeably free of the rubble and/or equipment noted after the first attack. It was not possible to determine whether these areas were evacuated prior to the second attack or whether the damage was cleaned-up and evacuated after the bombing occurred. The fact that no clean-up

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was evident after the first strike would give weight to the supposition that the mill's equipment had been removed prior to the second strike, (IB memorandum 471/66).

Viet Tri Chemical Complex  
21 17 55N - 105 25 32E  
(Figures 1 and 4)

The Viet Tri Chemical Complex consists of three plants - the Viet Tri Chemical Plant, the Viet Tri Paper Mill, the Viet Tri Sugar Refinery and Alcohol Plant. Imagery indicates that the entire complex is operating at a relatively high level of productivity.

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(a) Viet Tri Chemical Plant (21 17 54N - 105 25 25E).

This facility was observed on coverage [REDACTED]

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[REDACTED] On photography [REDACTED] (Figure 16) there appeared to be considerable track activity at the plant and growth of vegetation was controlled. There were no boats/barges at the waterfront. Photography [REDACTED] (Figure 17) showed 2 barges in the area of the plant's dock facilities.

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(b) Viet Tri Paper Mill (21 17 55N - 105 25 32E, Figures 1 and 4). On photography [REDACTED] (Figure 16) all increase in raw materials was noted in the open storage area and there were two large rafts of raw materials moored at the dock facilities of the plant. These rafts were nearly unloaded as of [REDACTED] (Figure 17). Both photographs show pollution in the river coming from the plant.

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Work on the bomb damage of the paper mill had started prior to [REDACTED] and photo coverage of [REDACTED] shows that almost all superficial damage to the plant had been completely repaired.

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(c) Viet Tri Sugar Refinery and Alcohol Plant (21 17 57N - 105 25 36E, Figures 1 and 4). A comparative analysis of this plant, using photography of [REDACTED] (Figure 16) and [REDACTED] (Figure 17) failed to reveal any appreciable change in the status of plant activity. No smoke, vehicular traffic, or materials could be detected, thus making it impossible to assess the level of activity.

Haiphong Phosphate Fertilizer Plant  
20 51 24N - 106 40 30E  
(Figures 1 and 5)

Productive activity appears to have decreased from a low level to no activity during the period from [REDACTED]

On photography [REDACTED] (Figure 18) there were no ships at the loading and unloading facilities, and no smoke was observed coming from the stacks. All of the raw material was in an orderly arrangement in open storage (See IB memorandum 340/66). By [REDACTED] (Figure 18) a major change had occurred in that all raw material in the open storage area appeared to have been moved or depleted. Only small photo prints of this plant are included in this report due to the poor image quality.

Haiphong Port Area  
20 51N - 106 40E  
(Figures 1 and 5)

There appears to be no major changes in the activity of the Haiphong Port Area between the period of [REDACTED]

Photography [REDACTED] (Figure 19) revealed that two small coastal freighters, four unidentified ships and a merchant ship were in the cargo berths in the Haiphong port. The two freighters were North Vietnamese and the merchant ship was Russian. Also, a number of barges were noted scattered throughout the area. There was approximately the same number of ships and small craft observed on photography [REDACTED] (Figure 19).

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[REDACTED]

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Haiphong Cement Plant  
20 51 44N - 106 40 18E  
(Figures 1 and 5)

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The facility shows a high level of activity for the period of

[REDACTED]

Smoke from the kilns was evident on photography [REDACTED]

[REDACTED]

Figure 20). Also a number of barges

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were noted at the mooring area adjacent to the plant. No new construction could be discerned during the referenced period. Because of poor image quality and infrequent coverage of this facility, it is difficult to make any conclusive statements concerning the number of kilns operating.

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[REDACTED]

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FIGURE 6



CHEMICAL FERTILIZER PLANT  
HANOI, NORTH VIETNAM  
20 56 41N - 105 50 23E

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FIGURE 7 25

AREA OF CONSTRUCTION

NEW ACCESS ROAD U/C

CHEMICAL FERTILIZER PLANT  
HANOI, NORTH VIETNAM  
20 56 41N - 105 50 23E

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FIGURE 8

VEHICLE REPAIR AND ASSEMBLY PLANT  
HANOI, NORTH VIETNAM  
20 59 55N - 105 48 41E

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FIGURE 9

VEHICLE REPAIR AND ASSEMBLY PLANT  
HANOI, NORTH VIETNAM  
20 59 55N - 105 48 41E

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BUILDING U/C

MACHINE TOOL AND EQUIPMENT PLANT  
HANOI, NORTH VIETNAM  
20 59 59N - 105 49 15E

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FIGURE 11

BUILDING U/C

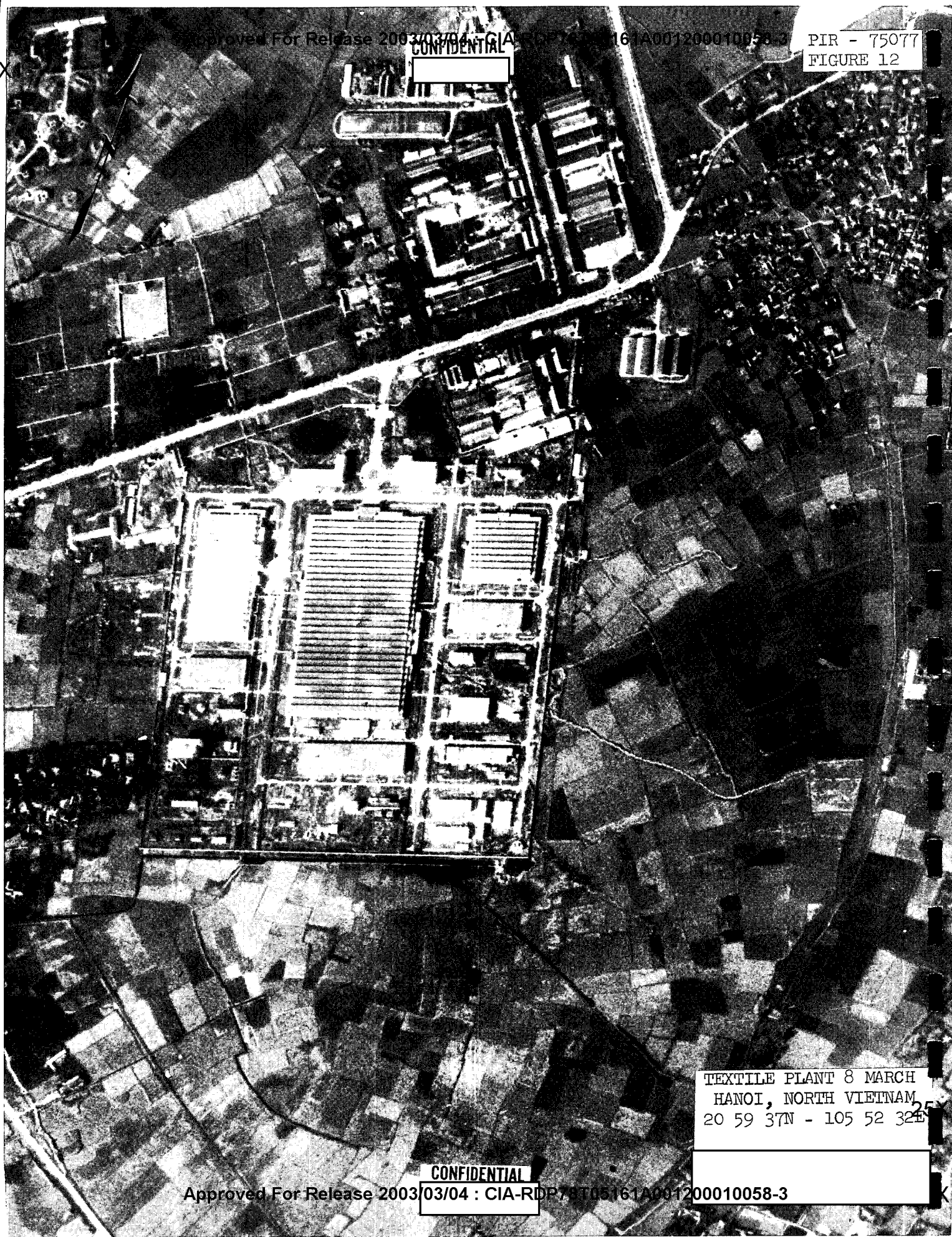
MACHINE TOOL AND EQUIPMENT PLANT  
HANOI, NORTH VIETNAM  
20 59 59N - 105 49 15E

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FIGURE 12



TEXTILE PLANT 8 MARCH  
HANOI, NORTH VIETNAM  
20 59 37N - 105 52 32E

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FIGURE 13

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FIGURE 13



TRAN HUNG DAO ENGINEERING PLANT  
HANOI, NORTH VIETNAM  
21 00 36N - 105 51 16E

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FIGURE 14



NAM DINH TEXTILE MILL  
NAM DINH, NORTH VIETNAM  
20 25 16N - 106 10 45E

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FIGURE 15

A

B

NAM DINH TEXTILE MILL  
NAM DINH, NORTH VIETNAM  
20 25 16N - 106 10 45E

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FIGURE 16

SUGAR REFINERY AND ALCHOL PLANT

CHEMICAL PLANT

PAPER MILL

VIET TRI CHEMICAL COMPLEX  
VIET TRI, NORTH VIETNAM  
21 17 55N - 105 25 32E

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← WASTE MATERIAL

RAW MATERIAL - OPEN STORAGE

RAW MATERIAL - RAFT

VIET TRI CHEMICAL COMPLEX  
VIET TRI, NORTH VIETNAM  
21 17 55N - 105 25 32E

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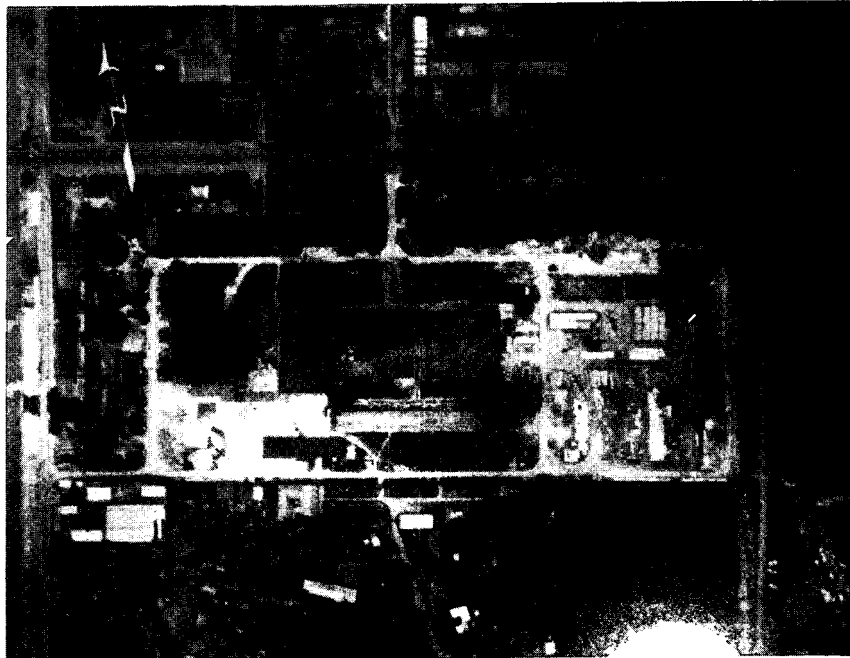
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FIGURE 18

PHOSPHATE FERTILIZER PLANT  
HAIPHONG, NORTH VIETNAM  
20 51 24N - 106 40 30E



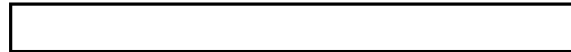
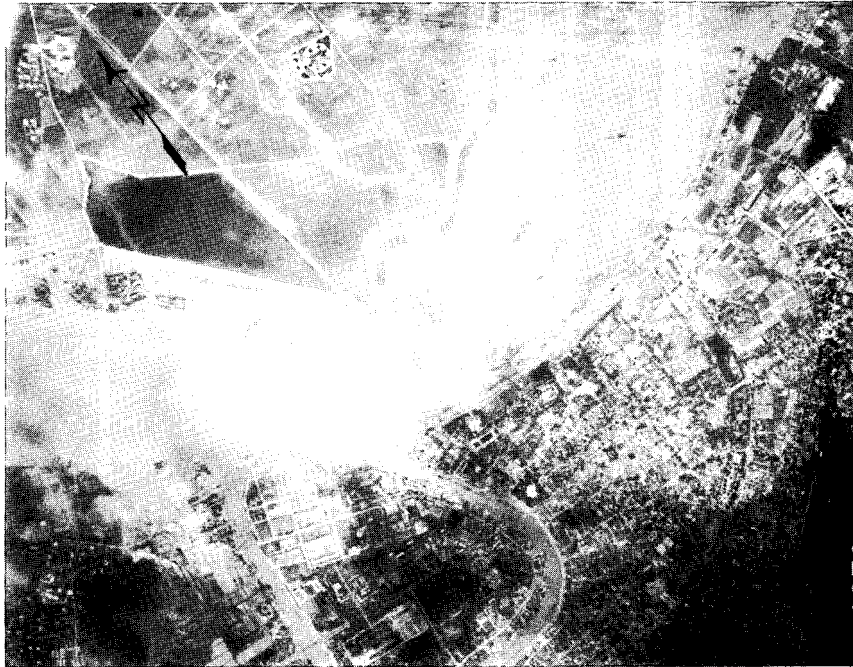
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FIGURE 19

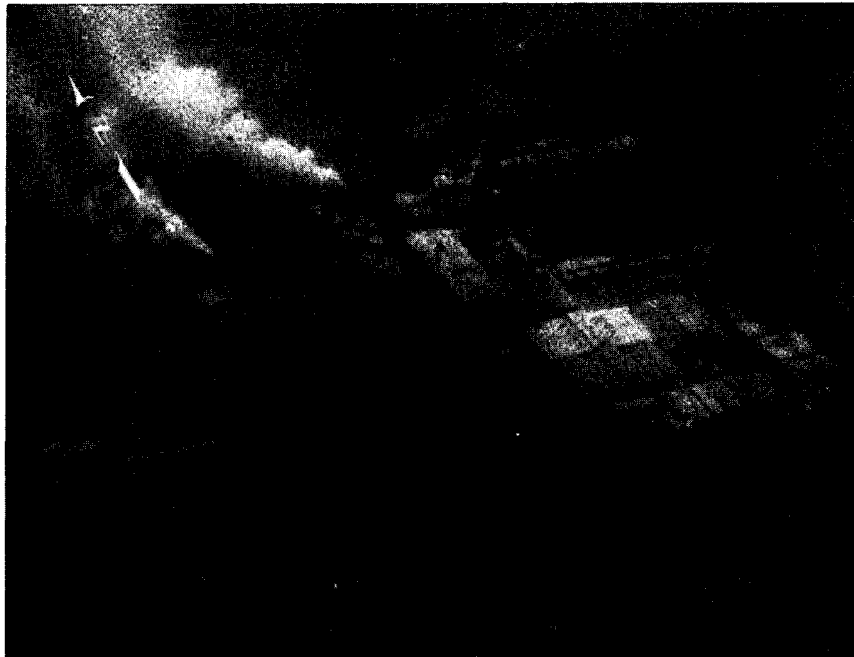
HAIPHONG PORT AREA  
HAIPHONG, NORTH VIETNAM  
20 51N - 106 40E



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HAIPHONG CEMENT PLANT  
HAIPHONG, NORTH VIETNAM  
20 51 44N - 106 40 18E



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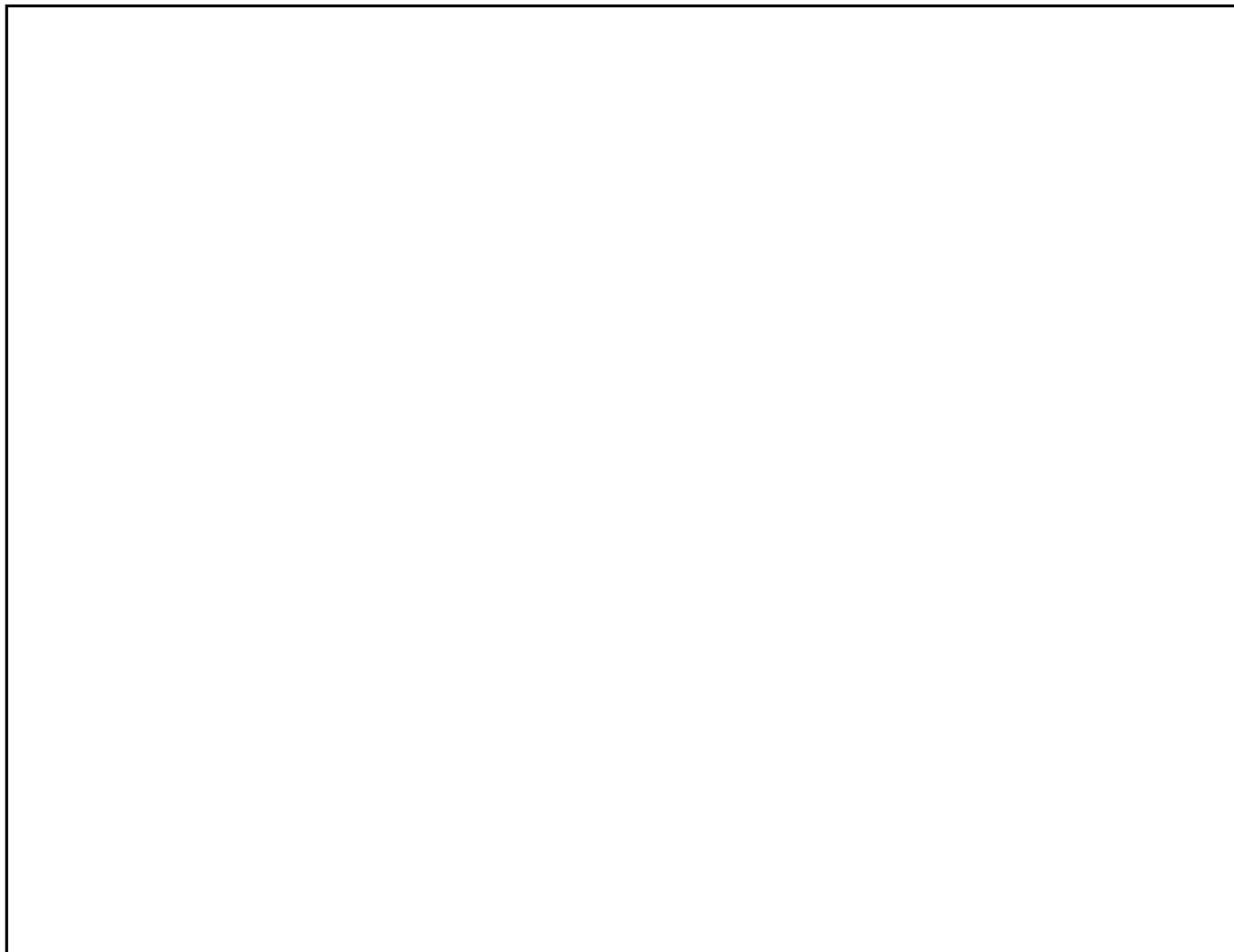
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MAPS AND CHARTS

Locator Map, North Vietnam, NPIC Base 11 (UNCLASSIFIED)

JOG (G) Series 1501, Sheet NF 48-16, 1st edition, June 1965 (UNCLASSIFIED)

JOG (G) Series 1501, Sheet NF 48-11, 1st edition, June 1965 (UNCLASSIFIED)

JOG (G) Series 1501, Sheet NF 48-15, 1st edition, June 1965 (UNCLASSIFIED)

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IB MEMORANDUMS

Confirming Economic Dispersal from Hanoi and Haiphong, North Vietnam  
IB 340/66 (CONFIDENTIAL)

Progress of Repair on Viet Tri Paper Mill, North Vietnam  
IB 476/66 (CONFIDENTIAL)

Analysis of Damage to Nan Dinh Textile Mill, North Vietnam  
IB 471/66 (CONFIDENTIAL)

REQUIREMENT

C-RR6-84,106

CIA/IAD PROJECT

30506-7

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